

SOFTWARE LABS

Online Backup

If you don't back up your hard disk, you risk losing everything. Simon Handby tries 10 online backup services for size

A reliable computer is a great asset, but at some point all but the luckiest of us has probably experienced some kind of hardware failure. If your hard disk gives up the ghost you could be waving goodbye to irreplaceable documents. In recent years our PCs have taken custody of our record collections, photo albums and home videos, which means they contain gigabytes of memories that could be lost forever.

Of course, that needn't be the case. Storage is cheap, and a good backup program (see the box below) will let you regularly copy crucial files to a spare internal, external or network drive. If the worst happens, though, your memories could still go up in smoke.

Home internet access has sped up a lot in the past few years, however, and for most of us it's now realistic to back up significant amounts of data online. A rash of companies promise fast, secure online backups, but what should you look for when choosing a service?

ENCRYPTION FACTOR

If you're about to upload your most important documents to a backup service, chances are they'll contain plenty of data that you want to keep private. It's essential that the software you choose encrypts your data and transmits it to a data centre using a secure protocol such as SSL, and that the data centre itself is properly managed and protected.

A good online backup service should understand that the privacy of your data is paramount, and the best are proud of the systems they use. Check the security details on the website, and if in doubt call the company and ask them to talk you through their arrangements.

All the services tested here encrypt data using a key that is known only to you, although some, such as Carbonite, can securely store a copy if you permit it. Forgetting or losing your key will otherwise render your backup completely useless, so it's very important that you don't.

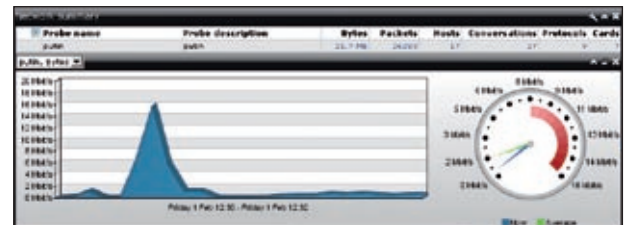
BANDWIDTH WAGON

Encrypting data increases its size, so online backup services need to be able to store many gigabytes of data. Some clever features help them minimise the impact on your broadband connection, but you should still check whether your backups will take you over your ISP's bandwidth cap or fair use policy.

Using compression makes typical uploads and downloads smaller than the source files, while a technique called in-file delta allows the software to spot small changes in large files, and copy only changed portions to the server. We tested this feature by modifying a Wav file and a TIFF image before carrying out our second backup. Services which only back up only the changed portions would reduce the second backup size by around two-thirds.

If you have multiple computers, look for services that don't restrict you to backups from only one PC. You'll find this information in the table on page 124.

In this labs test we've examined the entry-level package from 10 different services, testing how well they cope with everyday backups. Three with the least storage space are free, although their providers clearly hope that you'll want to upgrade at some point. Each company offers additional space and features if you don't mind paying a few pounds more, but in some cases you're better off saving your money. Read on to separate the lifesavers from the timewasters.



▲ It's no use having a fast broadband connection if your software can't get the best from it. The peak in the graph above is from a 15Mbit/s download test. Carbonite's restore (to the right of this peak) is far slower

THIS MONTH

Backups4All

Page 121

BackupRight Express

Page 121

BullGuard Backup 8.0

Page 121

Carbonite Online Backup

Page 121

IBackup for Windows

Page 122

IDrive Basic

Page 122

MozyHome

Page 122

nsure:express

Page 122

PerfectBackup

Page 124

SquirrelSave

Page 124

Soft options Backup applications

No matter how fast your home internet connection is, using it to back up your entire PC could take weeks. We recommend that you use an online backup service for your most important files to complement a conventional local backup.

You can make simple, informal backups by copying files manually to a second location, such as a removable disk or external storage device. Copying files is a quick and effective backup method, but you'll need to remember to do it, and it's easy to get confused if you're trying to keep track of multiple versions. You also need to close files before you can copy them manually.

Windows' built-in backup software is a better option, as it allows you to make scheduled backups and keeps track of multiple versions. Using a feature in Windows XP and Vista called volume shadow copy, it can even back up important files while they're in use, such as your email folders.

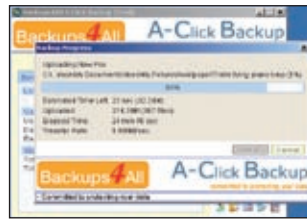
Windows Backup uses each file's 'archive' attribute to determine whether it has been modified since the last backup, allowing it to keep track of new and modified files. There are two modes for this. An incremental backup saves any files that have changed since the last backup, and sets the archive flag to show that the file needn't be copied again. A differential backup saves files that have changed since the last backup, but doesn't set the flag. Differential backups are bigger, but if your system goes down you need only one recent backup in addition to your original full backup to restore your data.

Many backup applications use the archive flag, but the online programs we tested use their own databases, leaving the flag unchanged. As such, each should coexist happily with the conventional packages we tested in *Shopper* 232, where Acronis True Image 10 Home won our Best Buy award.

COGNITION SOFTWARE Backups4All



£5.99 inc VAT per month (5GB)
From www.backups4all.co.uk



▲ Backups4All's time estimates were wildly optimistic

Backups4All is run by UK-based Cognition Software. You can sign up for a free 30-day trial, or take out one of a range of monthly subscriptions. Home users can choose from four storage levels, up to 20GB, which costs £18 including VAT a month – three times what SquirrelSave charges.

The service uses almost identical software to BackupRight. It's easy to install and configure but provides fewer options than other packages, such as Mozy. Backups can be started with one click and scheduled by day of the week and time, but continuous backup isn't an option.

Backups4All produces a detailed log file, but there's no bandwidth throttling or pause function. The progress window's estimated time was wildly optimistic in our tests. The application used very little processor time, but the processes that it ran together used more than 100MB of system RAM, which could be a problem if you don't have much.

When restoring, you can select individual files or folders and choose the backup date from which you want to take files. You can specify the original location, or a new folder. Subfolders are preserved if you choose this option.

Backups4All was one of the fastest applications when backing up, and its restores were comparatively well managed and acceptably quick. The software is a little basic, however, and the storage space is limited for the price.

SUMMARY

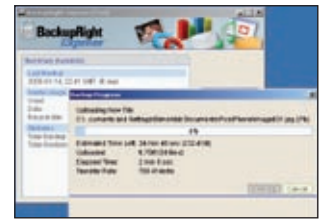
- ✓ Fast backups
- ✗ Software a little basic
- ✗ Expensive

ONLINE BACKUP SERVICE Requires
128MB RAM, 100MB disk space

BACKUPRIGHT BackupRight Express



\$13 (approx £6.50) per month (50GB)
From www.backupright.com



▲ BackupRight is a little basic, but you get plenty of storage space

BackupRight's client application is similar to Backups4All's, but the two are not related. Installation and features are almost identical, but BackupRight uses AES encryption, whereas Backups4All uses Twofish encryption.

BackupRight Express transmits data via the SSL secure protocol, and is encrypted before leaving your PC. A non-SSL version is also available.

BackupRight Express offers a 30-day free trial of the package tested here, which is limited to a single PC. The Pro package offers more storage space and support for multiple computers and backup sets. It also supports custom file retention policies for long-term storage of old file versions.

During the initial setup, you can configure a proxy for internet access. By default, data is encrypted with your BackupRight account password as the key, but you can specify your own. However, as with all but one of the applications on test, forgetting this key will render your backup useless, and the software doesn't warn you of this.

We found BackupRight Express fairly easy to use. It correctly detected minor changes to a large Wav file between our first and second backup tests. It backed up only the modified data, avoiding more than 30MB of unnecessary uploading. Like Backups4All, it's a decent package, but the software is basic. It offers much more storage for the money, though.

SUMMARY

- ✓ Backups are acceptably quick
- ✓ Plenty of storage for the money
- ✗ Software a little basic

ONLINE BACKUP SERVICE Requires
128MB RAM

BULLGUARD BullGuard Backup 8.0



£25 inc VAT per year (10GB)
From www.bullguard.com



▲ Back up your data locally or online with BullGuard Backup 8.0



BullGuard Backup 8.0 is one of only two products in this test that can back up either to a local disk or online. You can buy it as a standalone product, or as part of BullGuard's suite of security and anti-virus software.

A setup wizard makes it easy to select documents, music and pictures for backup, and there's support for common email clients. The advanced mode lets you build one or more custom backup sets and select the files and folders they contain. Each can be associated with a local or online backup drive, but not both. You can also back up to optical media.

BullGuard can back up your data on demand, according to a schedule or while your PC is idle. It displays the files yet to be uploaded, along with a per-file and overall progress bar, but there's no ETA. Backups were a little slow, and the software backed up modified files in their entirety, rather than just the changed portion, resulting in a 78MB differential backup.

We had first-hand experience of BullGuard's 24-hour support after a minor glitch during our tests. Using the built-in remote desktop feature, BullGuard's support staff were able to diagnose and fix the problem. It's an excellent feature, particularly if you're new to backups.

Although there's no throttle and the restore won't return files to their original location, BullGuard Backup 8.0 is well designed and easy to use. It's good value, too, making it our Best Buy for less technical users.

SUMMARY

- ✓ Very easy to use; great support
- ✓ Supports online and local backups
- ✗ Restore could be better designed

ONLINE BACKUP SERVICE Requires
200MB disk space, Internet Explorer 5.5 or higher

CARBONITE Carbonite Online Backup



\$50 (approx £25) per year (unlimited storage)
From www.carbonite.com



▲ Freeze your data with Carbonite, but don't expect it back in a hurry

Keen *Star Wars* fans will know that carbonite was the material in which Han Solo was frozen in *The Empire Strikes Back*. The Carbonite backup service tested here offers unlimited space for around £25 a year.

This is one of the easiest programs to set up, with a simple installation process and few technical decisions to make. The default setting is to back up My Documents and the Desktop, but you can make more detailed selections. Files to be backed up are marked with an orange dot, which turns green once they've been uploaded to Carbonite's data centre.

Carbonite Online Backup is designed to work continuously in the background, although you can set backup schedules if necessary. You can suspend the program's activities for 24 hours, or disable it altogether. Although there's no throttle, the program tries not to hog your internet connection, and can be set to low-priority usage.

We found ourselves wishing there was a high-priority mode, though, as Carbonite was one of the slowest products here. Restores were particularly leisurely, whereas most users are likely to want to regain their data with some urgency. We spoke to Carbonite, who confirmed in tests that they could restore a 59MB file in under two minutes. Despite retesting, we couldn't improve our time. Based on our experiences, we can't recommend Carbonite to users with very large amounts of data.

SUMMARY

- ✓ Easy to use
- ✓ Continuous backup
- ✗ Slow restores in our tests

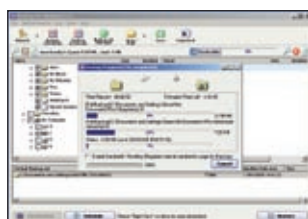
ONLINE BACKUP SERVICE Minimum requirements not specified

IBACKUP IBackup for Windows

★★★★★

\$9.95 (approx £5) per month
(10GB)

From www.ibackup.com



▲ IBackup may look a little dated, but it's the fastest program here



IBackup for Windows looks more dated than other programs here, but it's a powerful application with a well-designed interface. The main view displays local folders and the remote backup side by side, allowing you to compare files and versions.

Several wizards simplify common backup jobs: the automatic selection wizard, for example, lets you back up a range of applications simply by ticking a box. As with most of the packages here, you can install IBackup on only one PC, but it does let you create multiple backup sets and will quickly calculate the size of each. The interface displays the backups you've defined and your current quota usage. A free, but not particularly useful, plug-in adds support for SQL, Exchange and Oracle servers.

Although IBackup is a US company, it has a data centre in London. Uniquely in this test, the software transmits two files at once during backup and restore operations, which could improve throughput. There's an accurate progress meter, and you can change the bandwidth settings in real time. Backup times were competitive, and the software spotted our changed Wav file.

At 4.7Mbit/s, IBackup was comfortably the fastest program in our restore test. It offers a fair amount of space for the money, too, so it's our Best Buy for technical users.

SUMMARY

- ✓ Good value
- ✓ Great all-round performance
- ✗ May be intimidating for novices

ONLINE BACKUP SERVICE Requires 64MB RAM, 10MB disk space, Internet Explorer 5 or later

IDRIVE IDrive Basic

★★★★

Free (2GB)

From www.idrive.com



▲ Poor restore facilities take the shine off IDrive's free 2GB service

IDrive is produced by the company behind IBackup, but it shouldn't be confused with IBackup Drive, a free add-on that lets you map and access your IBackup storage as if it were a hard disk. IDrive is aimed at users with little or no backup experience, but it's surprisingly well specified, particularly as it's available for free with 2GB of storage. A Pro account costs \$5 (around £2.50) and gives you 'unlimited' storage, subject to a 150GB fair use clause.

Like IBackup, IDrive can make scheduled backups of a data set that you define. Unlike IBackup, it can also make continuous backups in the background, backing up new or changed files every 10 minutes.

IDrive is as easy to use as IBackup, but novices may find it less easy than products such as Mozy or Carbonite, which in effect configure themselves. It's not overcomplicated, though. Scheduling a backup was simple, and while backing up it displayed a progress meter with a pause and throttle. Both backup tests were faster than average.

Unfortunately, restore performance was less impressive. Unlike many of the products here, IDrive Basic can't detect the files that are already on your PC, so you must either select specific files and directories to restore manually, or restore your entire backup. We chose the latter, which saved duplicate versions of existing files with a .1 extension, resulting in a 210MB download. We'd rather pay the money for IBackup.

SUMMARY

- ✓ Good download performance
- ✓ Continuous backup
- ✗ Restore could be better designed

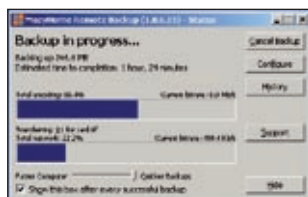
ONLINE BACKUP SERVICE Requires 512MB RAM, 10MB disk space, Internet Explorer 6 or later

MOZY MozyHome

★★★★★

Free (2GB)

From <http://mozy.com>



▲ MozyHome's 448-bit encryption added massively to our data's size

MozyHome is one of three products on test that provides a free account, but an unlimited account costs only \$5 (around £2.50). The install automatically selects My Documents and other files that should be backed up, and configures an automatic background backup. Even if you have no idea what you're doing, using the defaults should result in a reliable backup, as long as you keep your documents, pictures and music where Microsoft thinks you should.

Advanced options let you configure bandwidth throttling and proxy use. You can set automatic backups to check processor use, idle time and whether your notebook is running on battery power before starting.

MozyHome's backup progress meter is reminiscent of a disc-burning application, with one bar to measure the encoding progress and another keeping track of the upload. MozyHome's backups were among the slowest of the group, and Network Probe revealed that the application was transmitting around 50 per cent more data than any other. We suspected that MozyHome's 448-bit encryption may have been responsible. Mozy's director of support, David Dreyer, told us: "It does take a little longer, but it does afford you that practically impenetrable security measure to ensure your data is safe."

As with IDrive, we couldn't configure MozyHome to restore only missing files to our PC. Without us manually choosing files and folders, the restore transferred 258MB, creating duplicate files. This takes the shine off an otherwise great package.

SUMMARY

- ✓ Very easy to use
- ✓ Great value
- ✗ Restore could be better designed

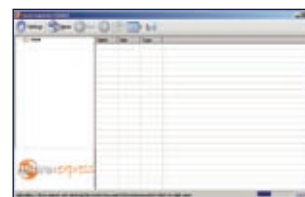
ONLINE BACKUP SERVICE Minimum requirements not specified

NSURE:BACKUP nsure:express

★

£25 inc VAT per year (2GB)

From www.nsure.it



▲ nsure:express's backup facilities are basic to say the least

When we reviewed nsure:express in *What's New, Shopper* 240, the entry-level 2GB package cost £2 a month. We concluded that it needed some improvements before we could recommend it.

While some of the other software here could best be described as simple, nsure is positively basic. With no scheduling options and no background backup facilities, it's more of an online storage application than a true backup program. Unfortunately, it's not a particularly good one. There are virtually no options, and although you make backups by dragging and dropping files into the application, you can't restore them in the same way. There's no in-application help, but you can download a PDF file.

The package doesn't use much system memory, but it made our test computer's 2.66GHz processor work flat out during backups and restores, while the system became very slow to respond during the former. It was the only application here that couldn't identify files that had already been backed up, so on our second backup it uploaded more than eight times as much data as SquirrelSave, stopping to ask us whether we wanted to replace files as it went. We chose to restore only our deleted documents folder and its contents. This was comparatively painless, but not especially fast.

For £25 a year, nsure offers only as much backup space as iDrive and Mozy's free packages. Although neither is perfect, both are better than nsure:express, which we still can't recommend.

SUMMARY

- ✓ Very simple
- ✗ Not particularly easy to use
- ✗ Little true backup functionality

ONLINE BACKUP SERVICE Minimum requirements not specified

PERFECTBACKUP

PerfectBackup

★★★★★

Free (1GB)

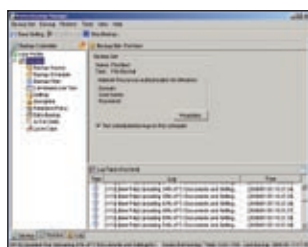
From www.perfectbackup.co.uk

PerfectBackup, based in York, offers a free 1GB entry-level account and various monthly subscriptions, each with a £25 setup fee. The company offers plenty of freebies, including a remote setup service, 'seed' loads – where you make your initial backup to a faster medium, such as a USB hard disk, and courier it to PerfectBackup – and restores for huge backups. It provides 24-hour phone and email support and, uniquely, a £1 million data guarantee for all customers, even those on the free account.

This is the only software on test that supports monthly as well as daily and weekly schedules. It's good to have, but we'd back up day-to-day documents far more regularly. It's also one of only two applications that can handle both online backups and backups to a local drive. Unlike BullGuard's service, it can save identical backups to both destinations in one operation, which is great for quick restores and maximum data safety.

PerfectBackup is one of the more complex programs here, providing advanced options such as detailed in-file delta settings. Frustratingly, though, it misses out on some more useful basic options, such as a bandwidth throttle. It was one of the fastest programs all-round in our test, producing a detailed log file in real time. There's no progress bar or ETA, though.

It's comparatively expensive, but a strong set of features makes PerfectBackup one of the better packages for more technical users.



▲ PerfectBackup offers lots of freebies and a £1 million guarantee

SUMMARY

- ✓ Lots of features and freebies
- ✓ Good performance
- ✗ Comparatively expensive

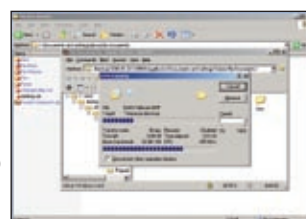
ONLINE BACKUP SERVICE Requires 128MB RAM, 100MB disk space

MEMSET

SquirrelSave

★★★★★

£5.82 inc VAT per month (20GB)

From www.squirrelsav.co.uk


▲ SquirrelSave makes continuous backups and keeps every version

SquirrelSave is from Memset, a Surrey-based hosting company. The software was due to be launched as we went to press, but the version we tested was still in beta and had a few bugs and unfinished features. Offering 20GB for less than £6 a month, SquirrelSave provides the most space per pound of any of the pay-monthly products.

SquirrelSave feels different to most of the packages on test. It has no conventional scheduling, but runs continuously, copying the files and folders you define to the remote storage. Having backed up your files, the software monitors them for changes, backing up modified files to the server straight away but also retaining previous versions.

Uniquely, SquirrelSave keeps unlimited historical backups, so you should be able to restore any version of any backed up file at any point. It's a powerful feature, particularly as the space it uses doesn't count towards your quota.

Data transfers were quick. It was the fastest to complete our second backup, transferring the least data in the process, and was the only application to process a modified TIFF file correctly. The backup browser we tested was basic, and the restore process was awkward, resulting in a larger than necessary download. We can't recommend SquirrelSave based on the beta version, but we'll test it again when it's officially launched. **CS**

SUMMARY

- ✓ Good value
- ✓ Clever continuous backup
- ✗ Can't recommend based on beta

ONLINE BACKUP SERVICE Minimum requirements not specified

MANUFACTURER	COGNITION SOFTWARE	BACKUPRIGHT	BULLGUARD	CARBONITE	IBACKUP	IDRIVE	MOZY	NSURE: BACKUP	PERFECT BACKUP	MEMSET
Product	Backups4All (Home)	BackupRight Express	BullGuard Backup 8.0	Carbonite Online Backup	IBackup for Windows	IDrive Basic	MozyHome	nsure:express	Perfect Backup	SquirrelSave
Rating	★★★★	★★★★★	★★★★★	★★★★	★★★★★	★★★★	★★★★★	★	★★★★★	★★★★
DETAILS										
Price	£5.99/month	\$13/month (approx £6.50)	£25/year	\$50/year (approx £25)	\$9.95/month (approx £5)	Free	Free	£25/year	Free	£5.82/month
Storage	5GB	50GB	10GB	Unlimited	10GB	2GB	2GB	2GB	1GB	20GB
Usage restrictions	Not stated, one backup set	One computer, one backup set	Three computers	One computer	One computer	One computer (recommended)	One computer	None	None	One computer
Encryption	128-bit Twofish	256-bit AES with private key	256-bit AES	1,024-bit Blowfish	256-bit AES	256-bit AES	448-bit Blowfish	256-bit AES	128-bit Twofish	256-bit AES
Protocol	128-bit SSL	http (128-bit SSL available)	128-bit SSL	128-bit SSL	128-bit SSL	128-bit over 256-bit AES	128-bit SSL	SFTP	128-bit SSL	256-bit AES over SSH
Schedule options	Day, time	Day, time	Day, time, when idle	Day, time	Day, time, email confirmation	Day, time, email confirmation	Day, time	None	Day, time	None
Support for open files	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pause/throttle	No	No	Pause	Auto low-priority mode	Throttle, pause	Throttle, pause	Throttle	None	None	Pause
Other features	Web restore access	None	Supports local and online backups, web restore access	Automatic updating backs up new/changed files	Web backup/restore access, auto power-off option after backup, free plug-in enables Exchange, SQL or Oracle server backup, web restore access	Continuous backup of new/changed files (10 min), auto power-off option after backup, suspend scheduled backup on user activity, web restore access	CPU threshold/idle time-restricted backups, web restore access	None	Web backup/restore access, £1 million data-loss guarantee, free seed load/restore, free remote installation/configuration, free agents for various data and email servers, restrict backup access by IP range	Free, permanent historical backups, realtime backups
Other packages/optional extras	Home/SOHO: 10GB £11, 15GB £15, 20GB £18. Business: various packages up to 500GB, include common server agents	BackupRight Pro: 500GB \$130 (around £65)/month. Unlimited computers	Two-year subscription £37.50. Extra storage £5/GB per year	None	Various packages with multiple users/snapshot feature. Optional: submit initial backup on USB storage device	iDrive Pro unlimited (150GB) storage \$4.95/month. Business packages up to 500GB \$50/month	MozyHome Unlimited \$4.95/month. MozyPro \$3.95/user plus \$0.50/GB per month	5GB £38/year, 10GB £50/year, 50GB £125/year, nsure: remote online shared storage	5GB £19/month, 50GB £90/month, other plans available. All chargeable plans incur £25 setup fee	Additional space £2 per 10GB/month
OS support	Windows 95/98/Me/NT/2000/2003/XP/Vista, Mac OS X 10.x, Novell Netware, Linux	Windows 95/98/Me/NT/2000/2003/XP/Vista, Mac OS X	Windows 2000/XP/Vista	Windows XP/Vista	Windows 98/Me/NT/2000/2003/XP/Vista	Windows 2000/2003/XP/Vista	Windows 2000/XP/Vista, Mac OS X 10.4, MozyPro supports Windows Server 2000/2003 but not Mac OS	Windows 2000/XP/Vista	Windows 95/98/Me/NT/2000/2003/XP/Vista, various Unix/Linux versions	Windows 2000/XP/Vista, Linux
System requirements	100MB disk space, 128MB RAM	128MB RAM	200MB disk space, IE5.5 or above	Not stated	10MB disk space, 64MB RAM, IE5.0 or above	Not stated	Not stated	Not stated	100MB disk space, 128MB RAM	Not stated
Product support	Live chat/email/telephone support	Email/telephone support	Live chat support with remote desktop assistance	Live chat/email/telephone support	Live chat/email/telephone support	Live chat/email support	Live chat/email/telephone support	Telephone support (£1/minute)	24-hour telephone/email support	Email
PERFORMANCE										
First upload (time/MB)	27m 40s/210.9MB	43m 47s/212.2MB	52m 15s/214.5MB	46m 49s/211.5MB	37m 59s/234.1MB	31m 38s/212.2MB	51m 16s/344.8MB	35m 31s/213.6MB	27m 35s/211.1MB	34m 25s/258.1MB
Second upload (time/MB)	4m 53s/35.5MB	6m 23s/35.5MB	14m 50s/78MB	49m 28s/74.8MB	7m 56s/34.8MB	8m 16s/35.5MB	16m 24s/111.1MB	34m 00s/212.5MB	5m 04s/35.5MB	3m 59s/24.9MB
Download (time/MB)	5m 07s/62.1MB	5m 10s/52.6MB	3m 05s/52.4MB	32m 00s/57.6MB	1m 31s/53.2MB	18m 22s/209.8MB	18m 40s/257.9MB	7m 19s/57.8MB	3m 23s/54.3MB	5m 47s/93.1MB
CONTACT										
Website	www.backups4all.co.uk	www.backupright.com	www.bullguard.com	www.carbonite.com	www.ibackup.com	www.idrive.com	http://mozy.com	www.nsure.it	www.perfectbackup.co.uk	www.squirrelsav.co.uk